

***NATIONAL WEATHER SERVICE INSTRUCTION 10-313  
OCTOBER 24, 2014***

***Operations and Services  
Marine And Coastal Weather Services, NWSPD 10-3  
SPECIAL MARINE WARNINGS***

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**NOTICE:** This publication is available at: <http://www.nws.noaa.gov/directives/>.

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**OPR:** OS21 (R. May)

**Certified by:** OS21 (M. Tew)

**Type of Issuance:** Routine

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***SUMMARY OF REVISIONS:*** This directive supersedes NWSI 10-313, Special Marine Warnings dated October 18, 2012. This directive includes the following changes:

1. Updated most of the examples in Appendix A.
2. Added “Special Marine Warnings may include special tags after the && to provide better definition, similar to other short term warnings.” See format box in Section 2.3.5.
3. Clarified SMWs should be issued for 2 hours or less in sections 2.2.2 and 2.2.6.

Signed

October 10, 2014

Andrew D. Stern

Date

Acting Director, Office of Climate,  
Water, and Weather Services

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**1 Introduction.** This procedural instruction provides detailed information on a product Weather Forecast Offices (WFOs) and Weather Service Office (WSO) Pago Pago issue concerning ongoing or imminent marine weather hazards. The Special Marine Warning (SMW) product provides the marine community with vital information to protect life and property.

**2 Special Marine Warning (product category SMW; Valid Time Event Code (VTEC) Significance / Phenomena MA.W)**

**2.1 Mission Connection.** The SMW product is used to provide specific details that aid in the protection of life and property. WFO forecasters and WSO Pago Pago forecasters issue polygon-based special marine warnings within their marine areas of responsibility for their coastal marine zones or Great Lakes marine zones to provide advanced notice to mariners of potentially hazardous weather conditions. SMWs are not issued for Offshore or High Seas areas, except in designated areas along the East Coast.

**2.2 Issuance Guidelines**

**2.2.1 Creation Software.** WFOs use the Advanced Weather Interactive Processing System (AWIPS) WarnGen Application to issue the SMW product. WSO Pago Pago issues the SMW with regionally approved software.

**2.2.2 Issuance Criteria.** WFOs and WSO Pago Pago should issue the SMW product for short-duration (2 hours or less) sustained marine thunderstorm winds or associated frequent gusts of 34 knots (KT) or greater; and / or hail 3/4 inch or more in diameter; and / or waterspouts. Forecasters should also issue the SMW for sustained non-convective short duration winds or associated frequent gusts of 34 KT or greater (gale force or stronger).

- a. Where VTEC is not used in the Alaska and Pacific Regions, issue the SMW for Ashfall warnings.

**2.2.3 Issuance Time.** The SMW product is non-scheduled and event-driven.

**2.2.4 Valid Time.** The SMW product is valid from the time of issuance until the expiration time.

**2.2.5 Universal Geographic Code (UGC).** The SMW product will contain marine-based zone UGC codes.

**2.2.6 Product Expiration Time.** The product expiration time should not exceed 2 hours beyond issuance time. A new SMW should be issued if the event is expected to continue past two hours beyond issuance time.

a. Where SMW is used for Ashfall Warnings. The product expiration time should not exceed 6 hours beyond issuance time. A new SMW should be issued if the event is expected to continue past six hours beyond issuance time.

**2.3 Technical Description.** The SMW product will follow the format and content described in this section.

**2.3.1 Mass News Disseminator (MND) Broadcast Line.** The SMW product should include the broadcast line “BULLETIN - EAS ACTIVATION REQUESTED”. If a state does not require Emergency Alert System (EAS) activation for the SMW product, the broadcast line will read “BULLETIN - IMMEDIATE BROADCAST REQUESTED”. The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

**2.3.2 MND Header.** The SMW MND Header is “SPECIAL MARINE WARNING”.

**2.3.3 Content.** The SMW product will be issued in standard bullet format, as outlined in NWS Instruction (NWSI) 10-1701, *Text Product Formats and Codes*.

Storm motion and wind speed should be expressed in KT.

SMWs may be issued while a Small Craft Advisory (any type), Gale, Storm or Hurricane Force Wind Warning (not associated with a tropical cyclone warning) is in effect. When a tropical cyclone warning is in effect, SMWs should only be issued for waterspouts.

For events impacting both land and water, separate warnings will be issued. SMWs will not include any portion of adjacent land areas.

**2.3.4 Call To Action (CTA) Statement.** If a Tornado Watch is in effect for the area, the Tornado Watch number may be included in the CTA section of the SMW product. Where SMWs are issued for Ashfall Warnings, mariners are encouraged to report ashfall and other volcanic impact encounters.

**2.3.5 Format.** The format of the SMW can be seen in Figure 1. The SMW is a non-segmented product. Please reference NWSI 10-1702, *Universal Geographic Code (UGC)*, for additional information on product segmentation. For detailed VTEC information, please reference NWSI 10-1703, *Valid Time Event Code (VTEC)*. For more detailed product format information consult NWSI 10-1701, *Text Product Formats and Codes*.

This product is available in industry standard encoding and languages, and may include, but not be limited to, American Standard Code for Information Interchange (ASCII), Extensible Markup Language (XML), Wireless Markup Language (WML) and HyperText Markup Language (HTML).

(WMO HEADER) (UTC ISSUANCE DATE TIME)  
 (AWIPS ID)  
 (AREAL UGC CODE[S])-(EXPIRATION TIME)-  
 (VTEC STRING)

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
 SPECIAL MARINE WARNING  
 NATIONAL WEATHER SERVICE (CITY)(STATE)  
 (ISSUANCE TIME) AM/PM (LOCAL TIME ZONE)(DAY)(DATE)

THE NATIONAL WEATHER SERVICE HAS ISSUED A

- SPECIAL MARINE WARNING FOR...(MARINE FORECAST AREA AFFECTED) (when multiple zones are covered, may list only the location points at the far end of the combined zones, and eliminate the intermediate points) (should list the zones in the numerical order of the UGC codes)

- UNTIL (ENDING EFFECTIVE TIME)

- AT (TIME)...(DESCRIPTION OF STORM EVENT, MOVEMENT)

IMPACT ON LOCATIONS, may reference marine and coastal land points, etc.)

- PATHCAST (Optional; include if storm impacts are not mentioned for affected locations / landmarks in the above section / bullet.)

CALL TO ACTION STATEMENT

&& (optional)

LAT...LON

TIME...MOT...LOC

[Mandatory list of latitude / longitude points outlining the forecaster drawn polygon in WarnGen and time, location, and movement of event being tracked. Special Marine Warnings may include special tags after the && to provide better definition, similar to other short term warnings.]

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**Figure 1. Special Marine Warning (SMW) Format**

**2.4 Updates, Amendments and Corrections.** Updates and amendments are not applicable. WFOs and WSO Pago Pago will reissue a SMW for significant grammatical errors, or format errors in marine zones already covered by a warning. WFOs and WSOs will issue a Marine Weather Statement, as described in NWSI 10-314, to provide the public with follow-up information or to cancel all or part of an SMW.

**APPENDIX A – Examples of Special Marine Warnings**

WHUS53 KDLH 120018  
SMWDLH  
LSZ142>145-162-120115-  
/O.NEW.KDLH.MA.W.0033.130912T0018Z-130912T0115Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
SPECIAL MARINE WARNING  
NATIONAL WEATHER SERVICE DULUTH MN  
718 PM CDT WED SEP 11 2013

THE NATIONAL WEATHER SERVICE IN DULUTH MN HAS ISSUED A

\* SPECIAL MARINE WARNING FOR...  
TWO HARBORS TO DULUTH MN...  
DULUTH MN TO PORT WING WI...  
SILVER BAY HARBOR TO TWO HARBORS MN...  
TACONITE HARBOR TO SILVER BAY HARBOR MN...  
LAKE SUPERIOR WEST OF A LINE FROM SAXON HARBOR WI TO GRAND  
PORTAGE MN BEYOND 5NM...

\* UNTIL 815 PM CDT

\* AT 715 PM CDT...DOPPLER RADAR ALONG WITH AUTOMATED WEATHER  
STATIONS...INDICATED WIND GUSTS TO 40 KT ASSOCIATED WITH A LARGE AREA  
OF RAIN AND EMBEDDED THUNDERSTORMS. THE LEADING EDGE OF THE MAIN  
AREA OF RAIN...AND GUSTY WINDS...WAS LOCATED GENERALLY 12 NM  
INLAND...APPROACHING THE NORTH SHORE OF LAKE SUPERIOR AT 30 KT.

\* WIND GUSTS TO 40 KT CAN BE EXPECTED IN THE AREAS OF...DULUTH  
HARBOR...KNIFE RIVER SAFE HARBOR...MCQUADE SAFE HARBOR...MOUTH OF  
THE AMNICON RIVER...SILVER BAY...PELLET ISLAND...SPLIT ROCK  
LIGHTHOUSE...AND SUGAR LOAF COVE.

\* IN ADDITION TO THE STRONG WIND...EXPECT BRIEF HEAVY RAIN AND  
LIGHTING WITH THESE STORMS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...  
BOATERS SHOULD SEEK SAFE HARBOR IMMEDIATELY...UNTIL THESE STORMS  
PASS.  
&&

LAT...LON 4682 9206 4693 9182 4709 9157 4713 9148  
4750 9096 4732 9064 4670 9178 4668 9199  
4673 9209 4673 9217

TIME...MOT...LOC 0018Z 284DEG 25KT 4754 9118 4691 9223

WIND...HAIL 40KTS 0.00IN

\$\$

WHUS56 KMTR 261541

SMWMTR

PZZ565-576-261615-

/O.NEW.KMTR.MA.W.0009.140326T1541Z-140326T1615Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED

SPECIAL MARINE WARNING

NATIONAL WEATHER SERVICE SAN FRANCISCO CA

841 AM PDT WED MAR 26 2014

THE NATIONAL WEATHER SERVICE IN THE SAN FRANCISCO BAY AREA HAS  
ISSUED A

\* SPECIAL MARINE WARNING FOR...

...COASTAL WATERS FROM POINT PINOS TO POINT PIEDRAS BLANCAS  
CALIFORNIA OUT TO 10 NM...

...WATERS FROM POINT PINOS TO POINT PIEDRAS BLANCAS 10-60  
NM...INCLUDING POINT LOBOS...

\* UNTIL 915 AM PDT

\* AT 838 AM PDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A  
WATERSPOUT 14 NM WEST OF POINT LOBOS...MOVING EAST AT 15 KNOTS.

\* THIS WATERSPOUT WILL BE NEAR 5 NM SOUTHWEST OF POINT LOBOS BY 915  
AM PDT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

THUNDERSTORMS CAN PRODUCE SUDDEN WATERSPOUTS. WATERSPOUTS CAN  
EASILY OVERTURN BOATS AND CREATE LOCALLY HAZARDOUS SEAS. SEEK  
SAFE HARBOR IMMEDIATELY. THIS STORM WILL PRODUCE SMALL HAIL AS  
WELL AS GUSTY WINDS.

&&

LAT...LON 3635 12190 3643 12224 3648 12225 3653 12194

3650 12193 3648 12194 3647 12192

TIME...MOT...LOC 1541Z 267DEG 15KT 3645 12220

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WHUS54 KCRP 261516  
SMWCRP  
GMZ250-270-261615-  
/O.NEW.KCRP.MA.W.0003.140326T1516Z-140326T1615Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
SPECIAL MARINE WARNING  
NATIONAL WEATHER SERVICE CORPUS CHRISTI TX  
1016 AM CDT WED MAR 26 2014

THE NATIONAL WEATHER SERVICE IN CORPUS CHRISTI HAS ISSUED A

\* SPECIAL MARINE WARNING FOR...  
...COASTAL WATERS FROM BAFFIN BAY TO PORT ARANSAS OUT 20 NM...  
...WATERS FROM BAFFIN BAY TO PORT ARANSAS FROM 20 TO 60 NM...

\* UNTIL 1115 AM CDT

\* AT 1011 AM CDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED  
A LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS 34 KNOTS OR  
GREATER FROM COASTAL WATERS FROM BAFFIN BAY TO PORT ARANSAS OUT  
20 NM TO WATERS FROM BAFFIN BAY TO PORT ARANSAS FROM 20 TO 60 NM...OR  
FROM 12 NM EAST OF BAFFIN BAY TO 31 NM SOUTHEAST OF CORPUS  
CHRISTI...MOVING NORTHEAST AT 10 KNOTS.

PRECAUTIONARY/PREPAREDNESS ACTIONS...  
MARINERS CAN EXPECT GUSTY WINDS...HIGH WAVES...DANGEROUS  
LIGHTNING...AND HEAVY RAINS. BOATERS SHOULD SEEK SAFE HARBOR  
IMMEDIATELY...UNTIL THIS STORM PASSES.  
&&

LAT...LON 2724 9736 2730 9734 2742 9706 2742 9659  
2724 9688  
TIME...MOT...LOC 1515Z 244DEG 9KT 2727 9729 2733 9688  
\$\$

WHUS51 KGYX 080022  
SMWGYX  
ANZ152>154-080115-  
/O.NEW.KGYX.MA.W.0024.131008T0022Z-131008T0115Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
SPECIAL MARINE WARNING  
NATIONAL WEATHER SERVICE GRAY ME  
822 PM EDT MON OCT 7 2013



THE NATIONAL WEATHER SERVICE IN GRAY MAINE HAS ISSUED A

\* SPECIAL MARINE WARNING FOR...

...CASCO BAY...

...NORTHERN COASTAL WATERS FROM CAPE ELIZABETH, ME TO MERRIMACK RIVER, MA OUT 25 NM...

...WESTERN COASTAL WATERS FROM PORT CLYDE, ME TO CAPE ELIZABETH, ME OUT 25 NM...

\* UNTIL 915 PM EDT

\* AT 818 PM EDT...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A LINE OF THUNDERSTORMS...PRODUCING STRONG WINDS 34 KNOTS OR GREATER FROM 18 NM WEST OF PORTLAND HARBOR TO 8 NM EAST OF RYE BEACH...OR FROM 18 NM WEST OF PORTLAND HARBOR TO ISLES OF SHOALS...MOVING NORTHEAST AT 55 KNOTS.

\* SOME LOCATIONS IN THE WARNING INCLUDE BUT ARE NOT LIMITED TO PORTLAND HEAD LIGHT...PORTLAND BUOY...GREAT CHEBEAGUE ISLAND...HALFWAY ROCK LIGHT...BAILEY ISLAND AND PEMAQUID POINT.

PRECAUTIONARY/PREPAREDNESS ACTIONS...

AS THUNDERSTORMS MOVE OVER THE WATER...BOATERS CAN EXPECT GUSTY WINDS AND HIGH WAVES. MOVE TO SAFE HARBOR OR STAY CLOSE TO SHORE UNTIL THE STORM PASSES.

A SEVERE THUNDERSTORM WATCH REMAINS IN EFFECT UNTIL 1000 PM EDT FOR BAYS AND WATERS OFF SOUTHWESTERN MAINE AND SOUTHERN NEW HAMPSHIRE.

&&

LAT...LON 4356 7037 4356 7020 4363 7032 4380 7018

4391 6987 4373 6983 4373 6981 4401 6986

4413 6976 4392 6980 4390 6977 4411 6960

4386 6966 4384 6951 4395 6945 4394 6945

4365 6950 4303 7037 4299 7076

TIME...MOT...LOC 0022Z 228DEG 53KT 4375 7056 4347 7046

4307 7052

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*Note:* Where MWW is issued Ashfall Warnings are carried in the MWW (see NWSI 10-315)

WHAK58 PAFC 301440  
SMW AFC  
PKZ176-302040-

BULLETIN - IMMEDIATE BROADCAST REQUESTED  
SPECIAL MARINE WARNING  
NATIONAL WEATHER SERVICE ANCHORAGE AK  
640 AM ADT FRI MAR 30 2007

...THE NATIONAL WEATHER SERVICE IN ANCHORAGE HAS ISSUED AN ASHFALL WARNING FOR VOLCANIC ASH AND OTHER HAZARDS IN THE WESTERN ALEUTIANS...

A SUBMARINE ERUPTION OF SEMISOPCHNOI VOLCANO IS IN PROGRESS.

THE ALASKA VOLCANO OBSERVATORY REPORTS STRONG SEISMICITY INDICATIVE OF AN EXPLOSIVE ERUPTION AT SEMISOPCHNOI ISLAND IN THE WESTERN ALEUTIANS. SATELLITE ANALYSIS INDICATES A VENT JUST OFFSHORE OF SUGARLOAF HEAD ON THE SOUTH POINT OF THE ISLAND. ASHFALL IS OCCURRING SOUTH AND SOUTHEAST OF THE ISLAND. VESSELS SHOULD AVOID THE IMMEDIATE AREA AND BE ALERT FOR FLOATING PUMICE.

AN ASHFALL WARNING MEANS THAT THE VOLCANO IS UNDERGOING A MAJOR ERUPTION. IT IS VERY LIKELY THAT MARINERS WILL BE AFFECTED BY VOLCANIC HAZARDS IN THE WARNING AREAS SUCH AS SIGNIFICANT DEBRIS...ASHFALL 1/4 INCH OR GREATER...LAVA...OR LAHAR AND DEBRIS FLOWS.

ADDITIONAL INFORMATION IS AVAILABLE AT / USE LOWER CASE LETTERS / [WWW.AVO.ALASKA.EDU](http://WWW.AVO.ALASKA.EDU).

ASH IS AN EYE AND RESPIRATORY IRRITANT AND IS ABRASIVE. THOSE WITH RESPIRATORY SENSITIVITIES SHOULD TAKE EXTRA PRECAUTIONS TO MINIMIZE EXPOSURE. PROTECT ELECTRONICS AND COVER AIR INTAKES IF ASHFALL IS EXPECTED OR CONFIRMED. REMOVE ASH FROM SURFACES WITH WATER IF POSSIBLE TO PREVENT EXCESSIVE ACCUMULATION.

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